CLAIMS

The following is a detailed listing of all claims that are, or were, in the Application.

1-11.   (Canceled)

12.   (Currently amended) A method for supplying an electronic document based on XML using a syntax defining a structure of the electronic document, the method, comprising:

supplying a document including an invalid element to delete a metadata fragment related to a television program contained in a previously supplied document, wherein deletion of said metadata fragment related to said television program is ~~notified~~ accomplished by ~~adding to-be-deleted~~ identifying said metadata fragment ~~to~~ in the invalid element.

13.   (Currently amended) The method of claim 12, wherein ~~the to-be-deleted fragment contained as contents of~~ the invalid element within the supplied document ~~is~~ may contain an identifier element which identifies the previously supplied document, and wherein when the identifier element is ~~supplied as the contents of~~ contained in the invalid element, the ~~corresponding~~ entire previously supplied document is deleted.

14.   (Currently amended) The method of claim 12, wherein when ~~an identifier identifying the corresponding document within the supplied document is contained and only the to-be-deleted fragment of the corresponding document are contained as~~ the invalid

element <u>contains only said metadata fragment to be deleted</u>, only the ~~corresponding~~ <u>metadata</u> fragment contained in the invalid element ~~are~~ <u>is</u> deleted.

15.   (Currently amended) The method of claim 12, wherein the to-be-deleted ~~fragment are~~ <u>metadata is</u> identified by the invalid element.

16-19. (Canceled)

20.   (Currently amended) A method for updating metadata ~~fragment included in an electronic document based on XML~~ describing a broadcasting program, wherein ~~a prescribed~~ <u>the</u> metadata ~~fragment~~ is stored in a client, the method comprising:

requesting an updated version of said ~~prescribed~~ metadata ~~fragment to~~ <u>from</u> a provider;

receiving <u>an electronic document based on XML having</u> an invalid element which ~~notifies at least one version~~ <u>indicates that a portion</u> of said ~~prescribed~~ metadata ~~fragment~~ is ~~identified by a fragment identification~~ <u>invalid</u>; and

deleting <u>said portion of</u> said ~~prescribed~~ metadata ~~fragment notified as said~~ <u>indicated</u> <u>to be</u> invalid ~~fragment~~ <u>by the invalid element</u> from said client.

21.   (Canceled)

22.   (Currently amended) A method for updating an electronic document based on XML, wherein said electronic document ~~which includes a fragment describing~~ <u>describes</u>

metadata for a television broadcasting program that is stored in a client, the method comprising:

requesting an updated version of said ~~fragment to~~ electronic document from a provider;

receiving said updated version of said electronic document, said updated version of said electronic document having an invalid element ~~notifying said fragment as an~~ which indicates that at least a portion of said metadata is invalid ~~fragment~~, wherein said ~~fragment~~ portion of said metadata is identified by ~~a fragment identification~~ the invalid element; and

deleting said ~~fragment notified as~~ portion of said metadata identified by the invalid ~~fragment~~ element from said client.

23. (Currently amended) The method of claim 22, wherein said ~~fragment~~ said portion of said metadata is previously received and stored in said client.

24. (Currently amended) The method of claim 22, wherein ~~said invalid fragment and~~ said invalid element ~~are~~ is defined by a syntax defining a structure of an electronic document, and wherein said syntax is XML schema.

25. (Currently amended) The method of claim 22, wherein said deleting includes identifying said ~~fragment~~ portion of said metadata identified by said ~~fragment identification~~ invalid element from said client.

26. (Currently amended) The method of claim 22, wherein said ~~fragment~~ portion of said metadata can be ~~notified as said~~ indicated to be invalid ~~fragment~~ by an invalid attribute.

27. (Previously Presented) The method of claim 26, wherein said invalid attribute is defined by a syntax defining a structure of said electronic document, wherein said syntax is XML schema.

28. (Currently amended) A method for updating ~~a fragment based on XML, wherein said fragment stored in a client describes~~ metadata related ~~on~~ to a broadcasting program, wherein the metadata is stored in a client, the method comprising:

requesting an updated version for said ~~fragment to~~ metadata from a provider; and

deleting said ~~fragment~~ metadata from said client when said ~~fragment~~ metadata is ~~notified as~~ indicated to be invalid ~~fragment~~ by an invalid element supplied from said provider, wherein said ~~fragment~~ metadata is identified by ~~a fragment identification~~ the invalid element.

29. (Currently amended) The method of claim 28, wherein said ~~fragment~~ metadata is previously received and stored in said client.

30. (Currently amended) The method of claim 28, wherein ~~said invalid fragment and~~ said invalid element ~~are~~ is defined by a syntax defining a structure of an electronic document.

31.   (Previously Presented) The method of claim 30, wherein said syntax is XML

schema, and wherein the broadcasting program is a television broadcasting program.

32.   (Currently amended) The method of claim 28, wherein said deleting ~~step~~

includes identifying said ~~fragment~~ said metadata identified by said ~~fragment identification~~

invalid element from said client.

33.   (Currently amended) The method of claim 28, wherein said ~~fragment~~

metadata can be ~~notified as said~~ indicated to be invalid ~~fragment~~ by an invalid attribute.

34.   (Previously Presented) The method of claim 33, wherein said invalid attribute

is defined by a syntax defining a structure of an electronic document.

35.   (Previously Presented) The method of claim 34, wherein said syntax is XML

schema.

36.   (Currently amended) A method for updating ~~a fragment based on XML~~

~~describing~~ metadata related ~~on~~ to a broadcasting program, wherein said ~~fragment~~ metadata is

stored in a client, the method comprising:

receiving a request for an updated version of said ~~fragment~~ metadata from said client;

and

supplying said client with an invalid element ~~notifying~~ indicating that said ~~fragment~~

~~as an~~ metadata is invalid ~~fragment~~, wherein said ~~fragment~~ metadata is identified by ~~a~~

~~fragment identification~~ the invalid element.

37.   (Currently amended) The method of claim 36, wherein said ~~fragment~~ metadata is previously supplied to said client.

38.   (Currently amended) The method of claim 36, wherein said invalid element ~~and said invalid fragment are~~ is defined by a syntax defining a structure of an electronic document.

39.   (Previously Presented) The method of claim 38, wherein said syntax is XML schema.

40.   (Currently amended) The method of claim 36, wherein said ~~fragment~~ metadata can be ~~notified as said~~ indicated to be invalid ~~fragment~~ by an invalid attribute.

41.   (Previously Presented) The method of claim 40, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document

42.   (Previously Presented) The method of claim 41, wherein said syntax is XML schema.

43.   (Currently amended) A method for updating ~~fragment stored in a client describing~~ metadata related ~~on~~ to a television broadcasting program, wherein said ~~fragment~~ metadata is ~~based on XML~~ stored in a client, the method comprising:

identifying a predetermined version of said ~~fragment~~ metadata as ~~an~~ invalid ~~fragment~~;

receiving a request for an updated version of said ~~fragment~~ metadata from said client; and

supplying said client with an invalid element ~~notifying~~ <u>indicating that</u> said ~~fragment as an~~ <u>metadata is</u> invalid ~~fragment~~, wherein said ~~fragment~~ <u>metadata</u> is identified by ~~a fragment identification~~ <u>the invalid element</u>.

44.   (Currently amended) The method of claim 43, wherein said ~~fragment~~ <u>metadata</u> is previously supplied <u>to said client</u>.

45.   (Currently amended) The method of claim 43, wherein said invalid element ~~and said invalid fragment are~~ <u>is</u> defined by a syntax defining a structure of an electronic document.

46.   (Currently amended) The method of claim 45, wherein <u>said</u> syntax is XML schema.

47.   (Currently amended) The method of claim 43, wherein said ~~fragment~~ <u>metadata</u> can be ~~notified as said~~ <u>indicated to be</u> invalid ~~fragment~~ by an invalid attribute.

48.   (Previously Presented) The method of claim 47, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

49.   (Previously Presented) The method of claim 48, wherein said syntax is XML schema.

50.　(Currently amended) A method for processing a response to a request for updating ~~a fragment based on XML describing~~ metadata related ~~on~~ to a broadcasting program, wherein said ~~fragment~~ metadata is stored in a client, the method comprising:

receiving an invalid element to delete said ~~fragment identified by a fragment identification supplied~~ metadata from a provider, wherein said invalid element ~~which notifies~~ indicates that said ~~fragment~~ metadata is ~~an~~ invalid ~~fragment,~~ wherein said metadata is identified by the invalid element;

identifying said ~~fragment~~ metadata identified by said ~~fragment identification from~~ invalid element at said client; and

controlling to delete said identified ~~fragment~~ metadata from said client.

51.　(Currently amended) The method of claim 50, wherein said ~~fragment~~ metadata is previously received and stored in said client.

52.　(Previously Presented) The method of claim 50, wherein said invalid element is defined by a syntax defining a structure of an electronic document

53.　(Previously Presented) The method of claim 52, wherein said syntax is XML schema, and wherein the broadcasting program is a television broadcasting program.

54.　(Currently amended) The method of claim 50, wherein said ~~fragment~~ metadata can be ~~notified as~~ indicated to be invalid ~~fragment~~ by an invalid attribute.

55.   (Previously Presented) The method of claim 54, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

56.   (Previously Presented) The method of claim 55, wherein said syntax is XML schema.

57.   (Currently amended) A method for replying to a request for updating a ~~fragment stored in a client describing~~ metadata related ~~on~~ to a broadcasting program, wherein said ~~fragment~~ metadata is ~~based on XML~~ stored in a client, the method comprising:

supplying said client with an invalid element to delete said ~~fragment identified by a fragment identification~~ metadata from the client, wherein said invalid element ~~notifies~~ indicates that said ~~fragment~~ metadata is ~~an~~ invalid ~~fragment~~.

58.   (Currently amended) The method of claim 57, wherein said ~~fragment~~ metadata is previously received and stored in said client

59.   (Currently amended) The method of claim 57, wherein ~~said invalid fragment and~~ said invalid element ~~are~~ is defined by a syntax defining a structure of an electronic document.

60.   (Previously Presented) The method of claim 59, wherein said syntax is XML schema.

61.   (Currently amended) The method of claim 57, wherein said ~~fragment~~ metadata can be n-~~notified as said~~ indicated to be invalid ~~fragment~~ by an invalid attribute.

62.   (Previously Presented) The method of claim 61, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

63.   (Previously Presented) The method of claim 62, wherein said syntax is XML schema.

64.   (Currently amended) A method for processing a response including an invalid element which ~~notifies a fragment~~ indicates that metadata stored in a client is ~~an~~ invalid ~~fragment~~ in ~~responsive~~ response to a request for updating said ~~fragment~~ metadata, wherein said ~~fragment is based on XML and describes~~ metadata ~~for~~ is related to a television broadcasting program, the method comprising:

    identifying said ~~fragment~~ metadata by ~~a fragment identification~~ the invalid element from said client; and

    controlling to delete said identified ~~fragment~~ metadata from said client.

65.   (Currently amended) The method of claim 64, wherein said fragment is previously received and stored in said client

66.   (Previously Presented) The method of claim 64, wherein said invalid element is defined by a syntax defining a structure of an electronic document.

67. (Previously Presented) The method of claim 66, wherein said syntax is XML schema.

68. (Currently amended) The method of claim 64, wherein said ~~fragment~~ metadata can be ~~notified as said~~ indicated to be invalid ~~fragment~~ by an invalid attribute.

69. (Previously Presented) The method of claim 68, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

70. (Previously Presented) The method of claim 69, wherein said syntax is XML schema.